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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/595,275

Filing Date: June 15, 2000

Appellant(s): PARANTAINEN, JANNE

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JUL 2 7 2005

GROUP 2600

Ralph D. Gelling For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 2/28/05.

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(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that claims 1,4, 5 and 6 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

6,308,082

KRONESTEDT et al.

10-2001

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(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Kronestedt et al. (U.S. Patent No. 6,308,082, "Kronestedt" hereinafter).

Regarding claim 1, the admitted prior art teaches a method for a communication connection over a radio interface between a terminal and a base station of a cellular packet radio system comprises the step of:

communicating a request message to the decision-making device, said request message indicating a need for setting up a new radio bearer between the terminal and the base station or changing the characteristics of an existing radio bearer between the terminal and the base station (see page 5, lines 32-34 of the specification of the present application) and indicating a certain set of Quality of Service parameters associated with certain first communication connection (see page 5, lines 32-34 of the specification of the present application).

The admitted prior art does not teach the steps of "mapping said set of Quality of Service parameters to a certain first channel coding and/or interleaving scheme as a part of the connection-specific channel coding and/or interleaving scheme allocation made by the decision-making device" and "communicating said first channel coding and/or interleaving scheme to the base station and the terminal for them to apply said first channel coding and/or interleaving scheme in said first communication connection".

On the other hand, Kronestedt discloses the steps of:

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communicating a request message to the decision-making device (col. 3, lines 53-56), said request message indicating a certain set of Quality of Service parameters associated with certain first communication connection (col. 3, lines 56-61),

mapping said set of Quality of Service parameters to a certain first channel coding and/or interleaving scheme as a part of the connection-specific channel coding and/or interleaving scheme allocation made by the decision-making device (46 in Fig. 4; also see col. 4, lines 30-34; col. 2, lines 60-62; col. 5, lines 24- 30) and

communicating said first channel coding and/or interleaving scheme to the base station and the terminal for them to apply said first channel coding and/or interleaving scheme in said first communication connection (44 in Fig. 4; col. 4, lines 35-42; col. 5, lines 16-20).

Kronestedt further teaches that a good quality link needs little or no channel coding to achieve an acceptable bit error rate (BER). On the other hand, in order to achieve an acceptable BER, a poor connection may need a higher channel-coding rate (col. 1, lines 37-42). Therefore, it is advantageous to use a link adaptation algorithm that adaptively chooses, from multiple coding schemes, the one channel coding scheme that achieves a desired throughput based on the time varying quality of the link (col. 1, lines 43-59; col. 2, lines 53-55).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the steps of "mapping said set of Quality of Service parameters to a certain first channel coding and/or interleaving scheme as a part of the connection specific channel coding and/or interleaving scheme allocation

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made by the decision-making device" and "communicating said first channel coding and/or interleaving scheme to the base station and the terminal for them to apply said first channel coding and/or interleaving scheme in said first communication connection" into the communication connection method of the admitted prior art, so as to achieve a desired throughput that is adapted to the link quality.

Regarding claims 4 and 5, the claimed limitation of communicating a request message in response to an observed need is inherent since a request message would not be sent if it were not needed to establish or re-establish a communication connection.

Regarding claim 6, claim 6 is a corresponding apparatus claim of claim 1. Claim 6 is rejected for the same reason applied to claim 1 above, since claim 6 recites equivalent limitations as in claim 1.

(11) Response to Argument

- (i) With respect to claims 1 and 6, the applicant makes the following arguments:
- (a) The Applicant argues that the portion of this application describing the admitted prior art makes no mention of applying a request independently to "a first communication connection."

Response --- On pages 5, lines 32-36 of the instant application, the applicant admits,

"it is known from prior art that an MS is capable of generating requests for setting up new bearers over the radio interface and in some cases for redefining the characteristics of existing bearers. It is likewise known from prior art that such a request may comprise, within appropriate fields, a selection of QOS parameter values which the MS would like the new or redefined bearer to have" (emphasis added).

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It is also noted that the applicant further states, "there is a radio interface between the MS 101 and the BS 102" (see page 5, lines 15-16 of the instant application) and "the new or redefined bearer is going to be used for certain type of transmission" (see page 6, lines 1-2). Therefore, it is clear that "the new or redefined bearer over the radio interface" is used for communication connection between the mobile station and the base station. The "new or redefined bearer" clearly reads on the claimed "certain first communication connection."

(b) The applicant also argues that the reference Kronestedt does not operate on a connection by connection basis because the selected modulation and channel coding scheme is implemented by all mobile stations and fixed-site transceivers of the cell.

Response --- The claims only require a "connection-specific channel coding and/or interleaving scheme". The claims do not require the use of different channel coding scheme for different connection. In fact, the claims only mention the connection between a mobile station (a terminal) and a base station. The claims never recite multiple connections between a plurality of mobile stations and base stations. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Kronestedt teaches establishing the relationship between quality of service parameter and the channel coding schemes (col. 5, lines 24-30). Kronestedt also teaches a mode selector that selects a channel coding scheme from a plurality of possible schemes based on the received quality of service (col. 4, lines 30-34). The selected channel coding scheme is used for communication link (see abstract). That is,

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the channel coding scheme to be used for the communication connection is specifically selected or specified in the Kronestedt reference. The selected channel scheme is therefore connection-specific because it is specified for connection. Thus, Kronestedt clearly teaches using the quality of service as a basis for selecting an appropriate, connection-specific channel coding scheme as claimed. Even though the selected channel coding scheme of Kronestedt is used for each link or connection in a given cell, the claimed limitation is still met since the selected channel coding scheme is connection-specific for each individual connection in the cell. The present invention and the Kronestedt reference may have difference in operation. However, the difference is never recited in the claim. Simply reciting "connection specific channel coding scheme allocation" in the claim does not patentably distinguish the present invention from the combined teaching of the admitted prior art and Kronestedt.

(c) The applicant further contends that the Examiner has characterized the "admitted prior art" utilizing the context of the description of the subject invention.

According to basic tenets of patent law, in order to support an obviousness rejection, there must be some desirability of making the modification, aside suggestion of the from the subject application. It is only the description of the subject invention that indicates a connection-specific allocation of coding and interleaving.

Response --- Where the specification identifies work done by another as "prior art," the subject matter so identified is treated as admitted prior art. *In re Nomiya*, 509 F.2d 566, 571, 184 USPQ 607, 611 (CCPA 1975). See MPEP 2129 II. The description in lines 32-36 in page 5 of the instant application is clearly identified as "prior art" by the

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applicant. Further, as pointed by the examiner, Kronestedt teaches that a good quality link needs little or no channel coding to achieve an acceptable bit error rate (BER). On the other hand, in order to achieve an acceptable BER, a poor connection may need a higher channel-coding rate (col. 1, lines 37-42). Therefore, a person of ordinary skill in the art at the time the invention was made would be motivated to modify the admitted prior art by adaptively selecting a channel coding scheme that is adapted to the link quality to achieve a desired quality of service such as BER. Such desirability of making the modification is found in the Kronestedt reference. It is not found from the description of the instant application as argued by the applicant. The argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning is not persuasive.

(ii) With respect to claims 4 and 5, the applicant simply states the arguments with respect to claim 1 and 6 apply equally to dependent claims 4 and 5. The response to the argument with respect to claims 1 and 6 above also applies equally to claims 4 and 5.

For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,

Chieh M Fan
Primary Examiner
Art Unit 2638

cmf July 22, 2005

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